

ABSTRACT OF THE DISCLOSURE

5 A high density multi-chip module and method for construction thereof, wherein a plurality of integrated circuit dice with at least one row of generally central bond pads ^{is} are bonded in a staggered flip-chip style ^{to} to opposite sides of a metallized substrate. The bond pads of each die are positioned over a through-hole in the substrate, and the bond pads are wire-bonded from ^{one} the opposite side ^{of the substrate} to circuitry on the opposing side of the substrate. Application of glob-top sealant into the through-holes seals the bond pads and bond wires. A ball grid array may be formed in the peripheral area surrounding the dice on one side of the substrate, or an edge connector may be incorporated for connection to an external circuit.

10

N:\2269\3638\patapp.wpd 1/7/99